

Suffixal Concatenation in the Classical Japanese Predicate:
Erstwhile Serial Verbs?

Charles J. Quinn, Jr.
The Ohio State University

The term 'classical Japanese' is more common among philologists and other scholars of the pre-modern Japanese textual tradition than among historical linguists. It refers in a general way to the language found in texts of the Heian period, which extended some four hundred years, from the late eighth century to the late twelfth. The period is named after the emperor's capital city, *Hei-an*, or 'Tranquil Peace' (present-day Kyoto). The city was the center of a courtly society that had recently begun to feel confident of itself, as China's peer when it came to courtly accomplishments, in particular in matters artistic and literary. Most of the examples employed in this paper are from the heart of this period, the tenth, eleventh and twelfth centuries -- times which saw the first flowering of the native poetic and narrative traditions. The language of these years is variously documented, in the form of several imperially commissioned anthologies of poetry and in a number of fictional romances, the longest and most famous of which, 'The Tale of Genji,' runs to six volumes in its modern annotated edition. It also served as the basis of the written or 'literary language,' which was used widely until the end of World War II.

The title also makes mention of 'concatenation,' which as I hope to show, was by this time largely reduced to derivational morphology, and took the form of inflecting suffixes. Although I am not going to focus on these derivations in diachronic perspective, I will suggest in passing why it is that they seem to comprise a good example of Talmy Givón's dictum that Yesterday's syntax is today's morphology.' A number of the structural principles displayed in the rich derivational morphology of this language show strong and interesting resemblances to principles that inform the structure of more properly serial constructions in languages such as Lahu (as described in, e.g., Matisoff 1969) or even English.

A brief survey of the combinatory potential of lexical bases (verbs, adjectives) and the various optional suffixes that comprised predicators in this language reveals that while the lexical bases can also be used alone as independent verbs, this is not true of the suffixes. Diachronically, the derivational morphology seems to have emerged as concatenations of separate verbs grammaticalized into strings of sequenced suffixes, and the initial syllable of all but the initial verb was in almost all cases reduced to zero, so that the derivational suffixes of the attested language are actually 'decapitated' verbs-turned-bound morphemes. Nevertheless, this array of suffixes, which serve to express valency shift, voice, aspectual shift, and various kinds of modality, retains many features that have been associated with serial verb constructions. What I should like to do is to describe the system

of predicator suffixes in enough detail to suggest that the roots of this language's derivationally expressed system of voice and aspect -- if not modality -- may well have been serial in form.

The derivations of predicate morphology in classical Japanese can be described as a set of inflecting suffixes, which attach to various inflected forms of the string they modify. A string consisted minimally of a lexical base, and up to four optional inflecting suffixes. My treatment will of necessity be selective, and limited to such features of the concatenation as are necessary to depict essential parameters. In the discussion to follow, I will refer to lexical bases and inflecting suffixes in terms of syllabic segments, which in the Japanese language of this time were of the shape (C)V. While a case can be made for a morphophonemic analysis that describes the language's verbs in terms of two main classes, viz. vowel-stem and consonant-stem (depending on the final segment of each), my transcription will follow the prosodic structure reflected in the Japanese orthography, for purposes of simplicity. This will make little difference for the discussion at hand, which will focus more on morphotactics than on morphophonemics.

There are two suffixes which mark shift in the valency of the predicate in classical Japanese. One of them, -[sa]su, is basically causative, and adds an argument to the predicate structure; the other, -[ra]ru, is at bottom a kind of middle voice, and indicates that the event represented occurs without any kind of volitional instigation, in a spontaneous manner. Each, however, has its extended uses, such as subject honorification, potentiality, and passivization. In order to indicate a property that the notions of causation and middle voice share with two kinds of perfective aspect -[sa]su and -[ra]ru will also be referred to respectively with the terms 'exoactive,' that is, externally instigated, and 'endoactive,' or internally initiated. Although I shall not argue the point here, I believe that the extended meanings of honorific, potential, and passive can be explained with reference to the transitivity, or valency, structures of these two suffixes, and so I take the notions causation and middle voice to be at the heart of what they mean. In terms of transitivity structure, -[sa]su and -[ra]ru represent, respectively, high and low transitivity, in the sense of Hopper and Thompson 1980: a causative involves an agent acting volitionally upon an object, with the result that some change is effected in it; the middle voice, by contrast, involves but a single argument, which undergoes some change as a result of an event that has no volitional, causing agent. These two suffixes thus provide derivational resources for making highly transitive predicates out of intransitive ones, and vice-versa. Furthermore, their binary difference in fact mirrors the most regularly developed distinction in the world of the Japanese verb: volitional transitive vs. non-volitional intransitive. Both earlier stages of Japanese and the present-day language feature several very large classes of paired verbs, one member of which is canonically transitive and the other of which is intransitive. Some examples of these paired verbs, which share the same root, are given below.

PAIRED TRANSITIVE/INTRANSITIVE VERBS (a sampler)

akasu 'spend [the night]'	madofasu 'confuse [him]'	sagaru 'it lowers'
aku 'day dawns'	madofu 'become confused'	sagu 'lower it'
nasu 'make X'	utsusu 'move it'	toosu 'let pass'
naru 'become X'	utsuru 'it moves'	tooru 'pass through'
kawakasu 'dry it'	chirasu 'scatter it'	morasu 'let leak'
kawaku 'it dries'	chiru 'it scatters'	moru 'it leaks'

These verbs typically fall out at the high and low ends of Hopper and Thompson's transitivity scale. The two suffixes to be examined, then -- causative -[sa]su and middle voice -[ra]ru -- continue the same expressive options that are so highly developed in the lexical classes of the paired transitive and intransitive verbs.

The use of these suffixes is illustrated in examples (1) and (2) below. The capitalized segments represent the suffix under discussion. Parenthesized capital letters to the right of each example are abbreviations to indicate the text from which the example was taken.¹

- (1) me no onna ni azuke-te yashinawa-SU. (TM)²
 wife LOC place-PF rear-CAUS

'Leaving [the girl] with his wife, he had her bring [her] up.'

- (2) isogi maira-SE-te (GM)
 hurrying go-CAUS-PF

'Having sent [him] in a hurry, . . .'

- (3) kaera-SE-tamai-nu (TM)
 return-CAUS-(↑)-PF

'[He] sent [him] home.'

In the first example, there are two clauses, one ending in the nonconclusive infinitive -te of a perfective suffix (an allomorph of the suffix -tsu).³ This indicates that the action of placing the girl has been realized. The following, main predicate of this sentence indicates that the temporally subsequent act of 'bringing up' was imposed upon the wife. The causative element is the capitalized suffix -su, which is here used in its unmarked finite form, signalling the mention of new, or un presupposed, information. The causee, the wife, is marked as the indirect object with the general locative particle ni 'in, on, at.' The causing agent, this woman's husband, is the topic of this stretch of the narrative, and is consequently unmentioned in this sentence. Note that both the lexical bases and the attached suffixes of these two predicates occur in forms that are members of an inflectional paradigm. In example (1), both the base azuke and the perfective suffix -te of azuke-te occur in infinitival form; the exocative -su is bound to the nonfinite base yashinawa-, and is itself inflected, again, in the unmarked finite.⁴

In example (2), we have the same exoactive suffix, but this time it occurs in its infinitive form, -se, and is followed by the perfective infinitive -te. Selectional restrictions are such that the valency suffixes and the perfective suffixes attach to different inflected forms: the former fuses to a form of its lexical base that never occurs alone, while the latter attaches to the infinitive. In both cases, however, the base is non-finite.

Example (3) shows a concatenation of the verb base kaera-, causative infinitive -se, subject honorific -tamai, also in its infinitive, and the unmarked finite inflection of perfective -nu. I will distinguish between the two perfective suffixes of classical Japanese, -tsu and -nu, when we take up the aspectual suffixes. (The upward-pointing arrow under -tamai is meant to indicate the 'looking up to' the referent that is implicit in the use of this honorific by the speaker.)

The next examples, (4) through (6), show the other valence/voice suffix, endoactive -[ra]ru, at work.

- (4) Fude o tore-ba mono kaka-RU (TC)
brush ACC take-COND things write-MID

'When I take up my brush, things just write themselves.'

- (5) Yuki ka to nomi zo ayamata-RE-keru (KKS)
snow DI QUOT only ID mistake-MID-FACT_i

'I took [the blossoms] to be, of all things, *snow*.'

- (6) Yorozu ni oboshi-tsuzuke-RARE-te (GM)
many LOC think(↑)-continue-MID-PF

'Unable to stop thinking of the many [things on his mind], . . .'

In the sentence that comprises example (4), the final predicate kaka-ru 'gets written' consists of a transitive verb that has been transformed into an intransitive one, by means of the endoactive suffix. The suffix appears here in its unmarked finite form, with the usual meaning of 'new information established.'

Example (5) shows the same endoactive suffix in its infinitive form, attached to the lexical base ayamata-, to yield ayamata-re, which is followed in turn by the modal suffix of established fact, here in its marked finite form, -keru. The effect here, as context suggests, is that the speaker did so unintentionally: this perception of blossoms as snow -- conventional to poetry of the period -- 'just happened,' despite himself.

In example (6), we have the compound lexical base oboshi-tsuzuke-, a verb which by itself denotes *volitional* continuation. It is marked with the endoactive valency suffix to indicate that in this case, the thinker is not acting volitionally.

Despite their antonymy, the two valency/voice converters -[sa]su and -[ra]ru did in fact occur together. Such combinations most likely evolved from strings like that in example (7), where the word kokoro-ogori 'heart-pride' (a compound noun of the form /noun + verbal infinitive/) combines with the light verb su 'do, make' (here in pretextual base se).

- (7) Ware-nagara kokoro-ogori se-rare-shi (OK)
I-despite heart-pride make-MID-FACT;

'My heart was filled with pride, despite myself.'

The light verb creates a verbal structure, to which kokoro-ogori 'heart-pride' provides the lexical content; the attached suffix of middle voice -rare indicates that this occurrence of 'heart-pride' was not volitional. The source of the endoactive -[ra]ru, by the way, is generally assumed to be the unmarked verb for 'be.' With respect to the middle, the order of the light verb su in this example is just the same as it would be if instead of the noun kokoro-ogori we had a non-finite verbal base, and the following su functioned as a suffix: ogora-se-rare- 'was made to feel proud'. It is generally agreed that this verb su, in fact, is the source of the exoactive valency suffix.

Let us now review the morphotactics illustrated in examples (2), (3), (5), (6), and (7). In each case, -[sa]su or -[ra]ru is embedded inside another suffix. The suffix that follows on the outside expresses, respectively, an aspectual meaning (perfective -te, as in numbers [2] and [6]), politeness (tamai in number [3]), or one of the two varieties of established fact (numbers [5] and [7]). Example (3) is interesting for the morphotactics evident there: the order of formative elements is apparently first, lexical base; second, a valency/voice suffix; third, a polite verb; and fourth, perfective. It would seem that when a verb is marked for valency/voice conversion and also politeness, aspect or modality, the valency/voice suffixes will in every case attach adjacent to the base, that is, come in a position closer to the verbal head. Example (3) also suggests that while politeness suffixes do not attach to the lexical base before those of valency/voice, they do attach at a point closer than suffixes expressing aspect: -tamai follows -se, but precedes -nu. The base is invariably non-finite, whether it is simply lexical or lexical plus suffix(es).

With this much of the picture sketched in, let us turn next to those suffixes that express perfectivity, and consider their place in this linear scheme. For this, we need to examine examples (8) through (15), which follow:

- (8) Jin no to ni hikisute-TSU. (MS)
guardhouse GEN outside LOC drag-discard-PF

'They discarded [the dead dog] outside the guardhouse.'

- (9) Soko ni hi o kurashi-TSU. (MS)
there LOC day ACC spend-PF

'[We] spent the day there.'

- (10) Ika de kiki-tamai-TSU-ramu. (MS)
how being hear-(∇)-PF-CONJ_{ii}
'How could [he] have heard/found out?'
- (11) Sari to mo goranji-TE-mu (IN)
that way QUOT even look(∇)-PF-CONJ_i
'That's just how he may see it.'
- (12) Haya fune ni nore. hi mo kure-NU. (TN)
fast boat LOC board sun even darken-PF
'Get in the boat quickly. The sun'll be setting.'
- (13) Hisashi[k]u nari-NURE-ba, . . . (QM)
long time become-PF-COND
'A long time having passed, . . .'
- (14) Yatsuhashi to iu tokoro ni itari-NU. (IM)
p.n. QUOT call place LOC reach-PF
'They reached a place called Eight Bridges.'
- (15) Fune kozori-te naki-NI-keri (IM)
boat gather-PF cry-PF-FACT_{ii}
'Everyone in the boat started weeping.'

As with the lexical classes of paired transitive and intransitive verbs and the valency/voice converters $-\text{[sa]su}$ and $-\text{[ra]ru}$, the options for expressing perfective aspect in classical Japanese also seem to distinguish between volitionally realized action on the one hand, and non-volitional realization, on the other. Examples (8) through (11) illustrate several inflected forms of the perfective suffix $-\text{tsu}$, which until the eleventh century or so was preferred in a clear majority of cases when an affirmative, transitive predicate was marked for simple realization. (Cf. Ono et al. 1974: 1432 ff.) Marking aspectual realization of volitionally instigated events was not the only meaning served by $-\text{tsu}$, but it looks to have been the prototypical one, from which all other uses can be explained as increasingly abstract extensions. We can follow the distinction we drew for valency/voice conversions, and call it the 'exocative perfective,' to indicate that the realization it indicates is prototypically imposed by a volitional agent, from 'without.'

Example (8) features a highly transitive verb as the lexical base, and it is further specified with the unmarked finite of exocative perfective $-\text{tsu}$, which gives us a simple declarative sentence. In example (9), we have a statement that the writer 'spent' a 'day' somewhere: the lexical base kurashi- is not as transitive a verb as that in the preceding example, but it is volitional, at least, and transitive nonetheless. The following $-\text{tsu}$ is again in its basic finite inflection. The next example, (10), shows the same

exoactive perfective -tsu, but this time in non-final position. Note that it comes after the infinitive tamai of the honorific verb tamau, and before the modal suffix of conjecture, -ramu.⁵ The statement is thus a conjecture about how an honored person might have got access to some information. Kiku cannot be said to be as transitive a verb as those in examples (8) and (9); it may be that in (10), the suffix itself implicates some effort on the part of the referent in 'finding out.' Of greater interest in this example, however, is the order of the suffixes. There is no valency/voice suffix, but after the lexical base, we have in order: 1) politeness, in tamai; 2) exoactive perfectivity, in -tsu; and 3) conjecture on the part of the speaker about this realized hearing, as marked with the final -ramu.

Example (11) shows exoactive perfective -tsu in its infinitive form -te, attached to the infinitive of the lexical base, as in previous cases. Again, a modal suffix follows an aspectual one. The modal this time too has to do with conjecture, but indicates that the guessed-at situation is closer to the speaker than the one examined in the previous example. This more proximate conjectural suffix, -mu, attaches not to the preceding perfective's unmarked finite, -tsu (as the distal conjectural -ramu does, in example [10]), but to its infinitive, -te. To the extent that the unmarked finite inflection -tsu is used to predicate indicative matrix clauses, and to the extent that infinitives like -te are not so used,⁶ the bond of the modal -mu can be said to be a tighter one, making it more of a piece with what precedes it than is the bond of the suffix -ramu. The less finite the base, the tighter the bond with the following suffix. Conversely, the more finite that base is, the more independent it is from what attaches to it, and the looser the bond between them.

Examples (12) through (15) illustrate another perfective suffix, which, continuing to draw the parallel with the valency/voice options, we can call *endoactive* perfective -nu. This suffix complements the exoactive -tsu in that it is found predominantly with intransitive, non-volitional predicates, and appears to have expressed a kind of realization that was not caused, but rather just 'happened.' In example (12), it is used of future time, spoken by a ferryman in warning to his dallying passengers. The sun's setting, of course, is a non-volitional event, as is the predicate hisashi[k]u nari 'become a long time' in sentence (13). In example (14), the intransitive and non-volitional verb itaru occurs in its infinitive. Nu simply indicates that the arrival expressed with this infinitive is realized, in a similar way, i.e., without causation. Incidentally, neither -tsu nor -nu necessarily indexes an event with respect to another time, although each does have extensions that amount to a kind of epistemic confirmation and a kind of 'high evidence,' or proximate, past tense. Depending on the discourse frame, sentence (14) could be interpreted as immanent (future) realization, as we saw in example (12). It seems clear that -nu is basically aspectual.

Example (15) describes an event with an intransitive lexical base, naki (infinitive of the verb naku), which is sometimes used to describe volitional acts (e.g., when suffixed with -tashi 'want to') and sometimes not. The use of *endoactive* perfective -nu, here in its infinitive form -ni, underlines the non-volitional nature of the weeping on this occasion, when a poem composed on the spot moved them so that they could not help but shed tears. Here, as with -te in example (11), the suffix itself seems to sway the interpretation of

the verb in its own direction, in this case, the non-volitional endoactive one. The final suffix on this predicate is the modal of externally or objectively established fact, -keri, used in its unmarked predicative form.⁷

None of the examples in the aspectual group of numbers (8) through (15) violates the morphotactic pattern we established with the first seven examples. To review that ordering, it is 1) lexical base, then 2) valency/voice, 3) politeness, 4) aspect and, last, 5) modality. Furthermore, each suffix inflects in a pattern that matches a major verb inflection paradigm. This inflectional similarity with verb paradigms is striking, and constitutes evidence for the verbal origins of these suffixes. The inflectional paradigms of some suffixes are regular, while others are deficient in certain categories. The deficiencies, it seems, are understandable on the basis of semantic factors. Chart I shows just how closely some of the suffixes match the inflectional paradigms for verbs.

Chart I

	<u>verb 'do'</u>	<u>valency/voice suffix EXO</u>
1. pretextual base	sa-	(sa)se-
2. unmarked infinitive	shi	(sa)se
3. unmarked finite	su	(sa)su
4. marked infinitive	sure	(sa)sure
5. marked finite	suru	(sa)suru
	<u>verb 'separate'</u>	<u>valency/voice suffix ENDO</u>
1. pretextual base	wakare-	(ra)re-
2. unmarked infinitive	wakare	(ra)re
3. unmarked finite	wakaru	(ra)ru
4. marked infinitive	wakarure	(ra)rure
5. marked finite	wakaruru	(ra)ruru
	<u>verb 'discard'</u>	<u>Exoactive Perfective suffix</u>
1. pretextual base	ute-	te-
2. unmarked infinitive	ute	te
3. unmarked finite	utsu	tsu
4. marked infinitive	utsure	tsure
5. marked finite	utsuru	tsuru
	<u>verb 'die'</u>	<u>Endoactive Perfective suffix</u>
1. pretextual base	shina-	na-
2. unmarked infinitive	shini	ni
3. unmarked finite	shinu	nu
4. marked infinitive	shinure	nure
5. marked finite	shinuru	nuru

summary of inflectional functions

1. pretextual base Names; morphotactic only; never occurs free.
2. unmarked infinitive Names; has textual functions; occurs alone.
3. unmarked finite Names; enters information as (new) text.
4. marked infinitive Names and refers to information as given.
5. marked finite Names, refers, enters information as text.

All of the above paradigms are complete for both the example verbs and for the suffixes. As I mentioned earlier, the valency/voice conversion suffixes -isasu and -raru are believed to grown out of what was originally the application in the role of serial verb of su 'do, make' and ari 'be,' respectively. Similarly, exoactive perfective -tsu and endoactive perfective -nu would seem to have originated in a serial application of the verbs utsu 'discard' and inu 'depart,' respectively. If this is the case, all of these verbs lost their first syllable as their relation to the preceding base grammaticalized: ari lost a, utsu lost its initial u, and inu, its initial i. This reduction is quite consonant with what we know about subordinate elements when they are juxtaposed to their heads: the nuclear element retains its form, while the satellite's form is reduced at the point of contact. The principle is an iconic one, in that where meanings are joined, structures are joined, with the lesser adapting to the major.⁸ The head in this case is the semantic head, i.e., the morphological base, and not the superordinate syntactic one, which comes last in the string and determines the grammatical category of the expression as a whole.⁹ Once this has happened, it seems clear that we are no longer dealing with serial verbs, but with their grammaticalized descendants, derivational suffixes.

It has been mentioned that not all suffixes show complete inflectional paradigms, and that this is generally understandable on semantic and/or functional grounds. Some of the modal suffixes cited in sentences (1) through (15), for example, are lacking pretextual bases and infinitives. The conjectural suffixes -mu and -ramu lack a pretextual base, which is to say that they play no roles in the larger structures that are built on that base, such as valency/voice conversion, conditionals, or negation. Nor do they participate in the expression of any derivations that take the infinitive as base, such as politeness, perfective aspect, or the modality of established fact. Actually, none of these meanings or functions matches very well with the meaning and function of -mu and -ramu, i.e., with conjecture or guessing about situations respectively near or removed from the speaker. The absence of unmarked infinitives in the paradigms of the modals of established fact, -ki and its derivative -keri, would seem to be for similar reasons.

At this point, we are ready to summarize the virtual structure of the concatenative strings we have been looking at, with an eye to the sequence of suffixes, from lexical base out to the periphery. Most possible suffixal options and their sequencing are summarized in Chart II, presented below.

CHART II
CONCATENATIVE SUFFIXES SUMMARY: Ordering of Suffixes

(/ = an inflectional interface)

1 + /lex. base/	2 + /valency/	3 + /politeness/	4 + /aspect/	5 + /modality ₁ /	6 /modality ₂ / //
Endo- Exo- active	Endo- Exo- active	up-down, apart	Endo- Exo- perfective; perfect	Est'd Fact ('past tense'); conjecture negation	like- lihood
inner derivational suffixes				outer derivational suffixes	
THE REPRESENTED SITUATION				MODALITY	
realm of the talked-about				realm of the talkers, their beliefs, attitudes, etc.	

CONCATENATIVE SUFFIXES SUMMARY: Ordering of Suffixes
Examples of the forms that fill the slots

lex. base	/ valency	/ politeness	/ aspect	modality ₁	/ modality ₂
hanaru	-[ra]ru	-tanau	-nu	-ki	-mu -zu -ramu
hanasu	-[sa]su	-tanau ₁₁	-tsu	-kemu	-ji -beshi
			-[a]ri		-rashI
			-tari		-zari -maji
				-keri	-meri
inner derivational suffixes				outer derivational suffixes	

Canonical Ordering of Morphological Marking on Verbs
(tendencies across 50 languages: Bybee 1985)

lex. base + valency	+	directional	+	aspect	+	tense	+	mood	+
In above scheme, corresponds to:		(politeness)		(same)		(FACT modality)		(nonfactual modality)	

A predicate string in the Japanese of this period could be suffixed with up to five suffixes, which are here represented in the numbers between the slashes. It is useful to think of each of these as a separate layer, since each suffix has scope over those that precede it, such that valency conversion

has scope over the lexical base, politeness has scope over both the lexical base and whatever valency suffix is attached to it, and aspect has scope over all of these. I have listed two kinds of modality, one each in layers 5 and 6; the difference between the two is that modals of layer 5 can be applied to situations or states of affairs that are evidentially accessible or close to the speaker, such as action s/he herself was or will be involved in, while layer 6 is reserved for modals that put the situation at an evidential remove from the speaker. Every suffixal layer is optional; all you really need for a predicate is the lexical verb or adjective. The respective ordering of the five layers that follow the lexical base is fixed, unless at some point in the derivation the verb ari 'be' is suffixed. This in effect 'restarts' the string, so that, for example, suffixes from as early as layer 4 can apply over a string that includes a modal from layer 6, if only it has been reframed with the 'be' verb (e.g., yuku-bek[u]ari-tsu 'will most likely have gone'). The 'be' verb can be suffixed to the base string at any level, all the way out to the second modal layer. I have elsewhere (1987) called such 'be' derivation 'complex conjugation,' and contrasted it to 'simplex,' which is what we have represented here. Adding the 'be' verb seems to create a detached, observed perspective, as if one were saying 'there is' of the string to which it attaches. But this takes us beyond the present discussion.

On the basis of the suffixes' scope, we can think of the continuum represented Chart II in terms of two meta-layers, 'inner' and 'outer,' which are indicated by the vertical line drawn between aspect and the first modality layer. Immediately following the lexical base and extending through the layer that includes the aspectual suffixes we have the inner suffixes of valency, politeness (a kind of social deixis), and the perfectives. The term 'inner suffixes' makes a useful distinction because up to the aspectual layer, all meaning is relevant to the state or event represented by the lexical base. To use a term of Michael Halliday's, this is the realm of *ideational* meaning. The 'outer suffixes,' by contrast, function to assess or comment on whatever has been expressed with the resources available through layer 4, by, for example, asserting as fact, conjecturing, denying the likelihood, etc., of that information. As suggested earlier, there is a remarkable consistency to be observed across the layers of the lexical base and of the suffixes of valency and aspect, such that the basic distinction between transitive and intransitive coded in so many paired lexical verbs is available derivationally through level 4, in the form of the *exo-* and *endoactive* options for valency and for perfectivity. This can be seen in the sample list of forms given in the middle section of this chart. The two lexical verbs on the left, intransitive hanaru 'get free' and transitive hanasu 'set free,' set the parameters for event-relevant semantic adjustments, namely the valency/voice suffixes *endoactive* -[ra]ru and *exoactive* -[sa]su and the perfective suffixes, *endoactive* -nu and *exoactive* -tsu.

The layering of suffixes can be interpreted as a structural correlate of a hierarchy of different meanings, each of which applies over the meanings embedded under it. Functionally speaking, the hierarchical arrangement allows components to be manipulated as a whole in the course of higher-order operations. The scheme as a whole is diagrammatically iconic, in that meanings that apply over other meanings stand in superordinate relation to those meanings. As Dan Slobin and his associates have taught us, this is a natural kind

of order, the order in which similar meanings are near each other, and dissimilar meanings distant, the order with which children have least trouble when learning for the first time to use verbal predicates with multiple parts.

Another side to this iconicity is that the more 'given' information comes earlier, insofar as every suffix presupposes the string it attaches to. That is, every suffix presupposes the lexical base and any other suffixes that precede it. Yet another kind of iconicity has to do with the degree to which a suffix is phonetically fused to its preceding string. I think a case can be made for the more inner suffixes, in particular the valency converters, being more tightly fused to the lexical base than any other suffixes are. This is because the base to which valency suffixes attach, the pretextual base, only occurs subordinate to other structures, and never alone. In contrast to the valency suffixes, all suffixes from layers 3 and 4 attach to the infinitive, which serves a number of functions, some of them as a free word. There is no phonetic fusion between the infinitive base and the suffixes of these layers.

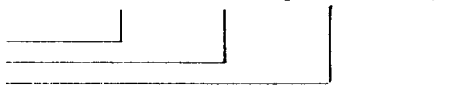
Among the outer suffixes of layer 5, the modals of established fact attach to the infinitive, while the modals of layer 6 attach to the unmarked finite form, i.e., to strings that are already marked with sentence-final, predicative inflections. Thus, the bond of layer 6 suffixes to their preceding strings is weakest of all. For the most part, then, suffixes that have least to do with the ongoing discourse -- valency and irrealis modality -- attach most tightly to the string that precedes them.

Since Japanese is an SOV language, the superordinate elements come later in the linear string. I have not provided a tree diagram, but if we had one, it would branch to the left, and the lexical base and its valency suffix would be hung from the tips of the lowest branches, and politeness, aspect, modality₁, and then modality₂ would appear in successively higher nodes. This gives us the interesting consequence that the modal suffix that completes the string is the syntactic head, and the lexical base, which all five layers of suffixes modify, is syntactically the most subordinate element of the string. Morphologically and semantically, the head might be said to be the lexical base, but syntactically and for the purposes of placing the string in the larger discourse, it must be the final, superordinate suffix that is head. It is the superordinate suffix, too, by which the entire string is categorized grammatically.

The last verbal examples, numbers (16), (17), and (18), are about as heavy as the layering actually gets on any one verb, that is, three suffixes' worth. I have drawn some nested boxes on example (16), in order to show the scope of each suffix, which, as the scopes suggest, we can consider as operators over what precedes them.

- (16) ke rare tari shi o
kick MID PRF FACT_i HYPO

verb base + voice + aspect + modality



'because [he] was kicked, . . .'

- (17) kooburi tamaware- / -ri / -kere-ba
court cap be bestowed PRF FACT_i-COND

verb + per- + FACT_i
base fect

lexicalized aspect epistemic
verb + middle -ual modality
shift

'Since [he] had been awarded his court cap [= rank], . . .'

- (18) kurai o kaeshi / tatematsuri / te / shi o
rank ACC return do (↓) PF FACT_i HYPO

verb humble perfective Established
base polite Fact_i

verb social aspectual epistemic
base deixis shift modality

'although [I] had retired from office [lit. returned his rank], . . .'

In (16), (17), and (18), the syntactic head is the last operator, which has the function of fitting the string into the larger context in which it does its work. In all three of these examples, that larger context is a matrix clause, for which each of these hypotactic clauses provides a reason. All but the final suffix/operator, moreover, are in non-finite form. In example (16), for example, the lexical base *ke-* is the pretextual base, a non-finite form that serves as base to valency suffixes and irrealis modality following. The endoactive valency suffix *-rare* then occurs in its unmarked infinitive form. The last operator in this string, established fact *-shi*, is in its marked finite form. I have added a display under each example, above the English translation, to schematize the significance of the three suffixes in use.

The structure of the derivational morphology of predicates in classical Japanese, then, takes the form of an iconically motivated (but entirely optional) layering of inflecting suffixes, which attach to a lexical base in the order 1) valency, 2) politeness, 3) aspect, 4) modality of greater eviden-

tial proximity, and 5) modality of less evidential proximity. It would appear that all of these suffixes originated in full verbs, such as su 'do, make' and ari 'be' for the valency suffixes -(sa)su and -(ra)ru; tamau 'humbly receive' for the identical honorific; or verbs utsu 'discard' and inu 'go away' for the perfective suffixes -tsu and -nu -- to name but a few. (Again, the inflectional paradigms of these suffixes match those of the verbs they are supposedly derived from.) In light of these more or less accepted etymologies, not to mention similar precedent in a good many other languages, it seems rather likely that the layered, suffixal predicate of classical Japanese is a more grammaticalized descendant of an earlier arrangement which was serial in structure. We may assume that the linear ordering of the component parts of this serial ancestor was the same iconic one that persists through the attested classical language we have examined here to the morphotactics of predicates in the present day language. The primary difference between the serial stage and the layered, suffixal structure attested in the classical texts would be the phonological reduction that followed the reanalysis of erstwhile serial verbs as inflecting suffixes; as the above list suggests, at some point, the serial verbs that followed the lexical base lost their initial syllables, as each following verb (the 'satellite,' in Langacker's [1987] term) merged phonologically with the base that preceded it. In this way, we may surmise, the verb utsu 'discard' eventually yielded the perfective suffix -tsu 'volitionally instigated realization,' as the verb inu 'withdraw, go away' yielded the perfective suffix -nu 'nonvolitional realization.' That derivational morphology in classical Japanese is suffixal in form follows rather naturally if we assume an earlier serial structure, reanalysis, and, in selected environments, phonological merger. The conversion of these verbs into suffixes would have played out in a scenario of the sort described by Givón (1988) and others, whereby structural code adjustment follows functional/pragmatic innovation.

The serial hypothesis makes sense too if we examine the attested classical predicate for typically serial characteristics. The layered complexes we have examined fit all of Sebba's (1987) criteria for serial verbs save the stipulation that 'both V1 and V2 must be lexical verbs, i.e., must be capable of appearing as the only verb in a single sentence.' The other criteria -- shared tense and aspect, monoclausality, and no conjunctive interruptions -- are met. Of all of the classical suffixes, only honorific tamau and humble/distal haberj, which did not undergo phonological merger with their preceding bases, would meet the 'independence' criterion; the vast majority of suffixes would not, for they had lost their initial syllable when functioning in concatenative strings of the sort we have examined. The layered suffixal predicate also meets three of Sebba's four criteria for 'subordinating' serial verb constructions: the 'single action' constraint, a 'strict ordering relation' among the verbs, and subcategorization constraints imposed by the initial verb in a string for those that follow¹⁰ it. The 'shared common argument' applies only when the suffixes are inner operators, i.e., when their function is ideational, and the notion of 'argument' is relevant, as for example, with the subject of sore kaeshi-tamau '(someone honored) will return that'. In this sentence, the subject of kaeshi (infinitive of transitive kaesu 'return') is also the subject of tamau. Nevertheless, if we look for a shared object, it does not emerge: sore is not the object of tamau -- certainly not in the sense that it is the object of kaeshi. As the nested

boxes in example (16) suggest, each successive suffix applies to the *entire string* (arguments, bases, suffixes) that precedes it, and thus only indirectly to the arguments of that initial lexical base. And the notion of an 'argument' is simply not relevant to a verb/suffix that expresses modal meaning. Only the suffixes of valency and politeness would seem at all likely to meet the 'shared argument' criterion; it is not clear how crucial the 'shared argument' criterion is to serial strings in which the only guaranteed shared argument is a subject, as would have presumably been the case with our hypothesized pre-Japanese predicates.

Although the layered suffixal strings of classical Japanese predicates likewise fail Noonan's (1985) requirement that the shared argument be an *internal* argument (e.g., a direct object), they do meet his other four criteria for serialization, viz. 1) simple juxtaposition of the verbs involved, 2) close semantic tie/same event, 3) single mood, evidential status, and/or polarity, and 4) joining of the verbs into a word-like unit. The shared internal argument criterion would seem to be one way of distinguishing serial constructions from sequences of verbs that constitute a unit of /head + auxiliaries/. Even if we consider the kinds of strings we have examined hypothetically, i.e., in their pre-suffixal, full-verb form, then, it is only in a special sense that more than one of the component verbs would have shared a single internal argument.

There are other ways in which the suffixal strings of classical Japanese predicates resemble serial verb constructions. As most of the examples we have examined suggest, the suffixes attach to two kinds of base: finite and non-finite. Inner suffixes, which are primarily of ideational significance, attach to non-finite bases,¹¹ while the outer suffixes -- the various modals -- attach primarily to finite bases.¹² This suggests that the outer suffixes are not as much a part of the string structure as are the inner ones. If any part of the classical Japanese predicate was at one time serial in structure, then, it seems that it would have been at the inner, not outer layers, since it is these layers that are almost always non-finite, and show the typically serial characteristic, found 'with great cross-language consistency,' of 'lack[ing] most grammatical trimmings of verbhood,' since they are coded 'not . . . as typical verbs, but rather as stripped-down stems' (Givón 1988: 40). By contrast, insofar as they attached to a *finite* base, the *outer* suffixes of this language did not co-lexicalize to the extent that the inner suffixes did. Significantly, the outer suffixes do not interact at the ideational level with the string to which they attach,¹³ and they apply to virtually any kind of preceding string, regardless of its semantics.¹⁴

If serial verb constructions tend to develop 'gradually from independent, finite verbal clauses, through various stages of reduced finiteness toward eventual full grammaticalization' (Givón 1988: 42), it is the inner suffixes of these derivational strings that would have followed such a course of evolution. In sum, the derivations of classical Japanese are part suffix and, in terms of their inflections, part verb. Inflections suggest verbal origins, and the morphotactics suggest that those origins were in some sense serial. Finally, for an SOV language like Japanese, a category of verb/suffix is the expected analogue to what Pawley (1973) and Durie (1988) have called 'a common feature' of Oceanic languages, 'lexical categories intermediate between verb and preposition' (Durie 1988: 1), which derived from earlier, serial verbs.

Notes

1. Abbreviations for grammatical items are as follows:

ACC = accusative
CAUS = causative, 'exoactive' valency
COND = conditional
CONJ_i = conjecture (subjective, evidentially proximate)
CONJ_o = conjecture (objective, evidentially distant)
DI = doubted identification
FACT_i = established fact (subjective, evidentially proximate)
FACT_o = established fact (objective, evidentially distant)
HYPO = hypotaxis (marked on subordinate clause)
ID = identification
LOC = locative
MID = middle voice, 'endoactive' valency
QUOT = quotative
PF = perfective
PRF = perfect

2. For the record: GM = Genji monogatari; IM = Ise monogatari; IN = Ienaga nikki; KKS = Kokinshū; TC = Tsutsumi chūnagon monogatari; MS = Makura no sōshi; OK = Okagami; TN = Tosa nikki; TM = Taketori monogatari.

3. This suffix will be relabeled as 'exoactive perfective,' and opposed to an 'endoactive perfective' in the section below on the two varieties of perfectivity.

4. A functional reanalysis of the traditional inflectional options in classical Japanese gives six (four non-finite and two finite): a pretextual base (mizenkei, non-finite), an unmarked infinitive (ren'yōkei), a marked infinitive (izenkei, which marked presupposed information), an unmarked finite (shūshi), a marked finite (rentaikei, which marked presupposed information), and an imperative (meireikei, non-finite).

5. The distinctions marked with the subscripted 'i' and 'ii' on the paired modals of FACT and CONJecture need not concern us here, but in each case, the shorter form -- marked with 'i' -- refers to the situation as being evidentially closer to the speaker, in space, time, or otherwise, than the longer form, which is labelled with 'ii.'

6. Unless the verb is a pure stative verb of the ari 'be' class.

7. Three points about -keri: 1) it is a compound of FACT_i, -ki and the verb ari 'be'; 2) it differs from FACT_i, -ki in terms of greater evidential or epistemic distance from the speaker (rather as CONJecture_o, -ramu differs from CONJecture_i, -mu); 3) like ari and all purely stative verbs, declarative uses of this suffix used its infinitive.

8. On this point, see the discussion in Langacker 1987: 361 ff, especially p. 363.

9. See the distinction drawn in Arnold Zwicky's paper, this volume.

10. This is true, to a certain extent, of what I have called 'inner' suffixes or operators -- those of valency and aspect.

11. In traditional terms, to the mizenkei and the ren'yôkei.

12. The forms that end in /u/, traditionally termed shûshikei and the rentaikei.

13. In Halliday's terms, the outer suffixes serve a mostly 'inter-personal' function.

14. If a pause occurred at any point in these strings, we would expect it before one of the outer suffixes, and this would constitute evidence that they are not as suffixal in nature as their inner cousins.

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